WORLDWIDE NUCLEAR WASTE MANAGEMENT

Fill in the matrix below while watching the videotape *Worldwide Nuclear Waste Management.* The matrix will give you the data needed to complete the discussion questions.

Country	Number of Powerplants	Number of Sites	Percent of Electricity Derived from Nuclear Power	Reprocess (Yes/No/NA*)	Year Repository is to Open or Be Sited
Belgium	7	2	60	Yes	2020
Canada	19	5	15	No	2015
Finland	4	2	35	No	2000
France	56	20	75	Yes	Early 2000's
Germany	22	17	33	Yes	2000
Japan	40	15	26	Yes	NA
The Netherlands	2	2	5	Yes	Near Future
Spain	9	7	38	Yes (for 1 plant)	Next Decade
Sweden	12	4	46	No	2020
Switzerland	5	4	43	NA	2020
United Kingdom	37	14	20	Yes	2005
United States	more than 100	33 States	21	No	2010

*NA = Information not available

NOTE: Since 1992, nuclear waste management programs have also been considered in Argentina, India, and Italy.

Discussion Questions

1. What is the total number of nuclear powerplants for the 11 countries other than the U.S.?

   (213)

2. Which country receives the highest percentage of electricity from nuclear power? *(France)*

   the lowest percentage? *(The Netherlands)*

3. What is the average percentage of electricity from nuclear power for these 12 countries?

   (34.75%)

4. Which country has the most nuclear powerplants? *(U.S.)* the least? *(The Netherlands)*

5. Does the country with the most nuclear powerplants also have the highest percentage of nuclear power? *(No)*

6. If not, why would a country with fewer nuclear powerplants have a higher percentage of electricity derived from nuclear power? Explain.

   (A country with fewer nuclear powerplants may have a smaller population and less industry to use the energy. Therefore, fewer powerplants can provide a greater percentage of the electricity.)

7. How many countries reprocess their fuel? *(7)*

8. What is the common goal for these and all other countries who operate nuclear powerplants?

   (To provide for the safe, permanent disposal of nuclear waste.)

9. In what kind of facility do these countries plan to dispose of high-level nuclear waste?

   (A deep underground geologic repository.)

10. When should siting or operation of these storage facilities begin for most of these countries?

    (In the early 21st century.)